

Agpaytech's Research  
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**Does Electronic Levy Affect  
Consumers' Payment Choice?**  
*A Case Study of Ghana*



*The e-levy which aims to widen the tax net and rope in the informal sector expected to rake in close to ₺6 billion in tax revenue for the country.*

## Executive Summary

Based on the recent imposition of 1% (originally 1.5%) electronic levy (e-levy) on mobile money transactions, many mobile money agents, individual consumers and retailers who preferred using it for most of their daily financial transactions made known their displeasure. The e-levy which aims to widen the tax net and rope in the informal sector expected to rake in close to ₺6 billion in tax revenue for the country. The levy shall be charged on an electronic transfer at the time of transfer by the entities, electronic money issuers, payment service providers, banks, specialized deposit-taking institutions, and other financial institutions authorized by the act.

This study used the 2022 economic data report from the Bank of Ghana to examine the impact of electronic levy (e-levy) on consumers' choice of payment in the mobile money sector. Applying the basic consumer behavior assumption that they will change in attitude due to the tax, the study found otherwise. Despite the e-levy and its surrounding agitations, the trends of total individual registered and active mobile money accounts remained unchanged. Similarly, the total registered merchants/agents and the active merchant/agents trends showed the same growth from April 2022. In terms of the number and value of transactions, they have rather increased ever since the implementation with a little sloped down in May 2022 when the e-levy started.

The study found that unusual behavioral response to the e-levy on mobile money was mainly due to the limited consumer choice of payments. This is because the convenience, familiarity and societal norms associated with mobile money provide strong foundation for its usage. Further checks reveal that limited availability and competitive retail payment methods restrict consumers from switching to other payment especially in Africa region.

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## Introduction: Taxation in Ghana

Tax is a charge levied on the citizens by a country or state. Tax is an obligatory payment that the country imposes on its citizens, firms, and organizations not as a penalty for any offense or immediate exchange of goods but as income to enable the government to meet its expenditure (Ali-Nayea, 2008). The continuous restructuring of the Ghanaian tax system has led to the enactment of the Ghana Revenue Authority Act, 2009 (Act 791) which established the Ghana Revenue Authority (GRA). The GRA was formed to integrate the three revenue agencies, namely the Internal Revenue Service (IRS), Value Added Tax (VAT) Service, and Customs, Excise, and Preventive Service (CEPS).

Taxation plays an important role in the development of every economy as well as the growth of gross domestic product (GDP). However, if the tax structure is not adequately designed for the specific environmental conditions, it may create a burden on the tax-paying organizations or entities and eventually affect the final consumer due to the shifting ability of tax. According to a study report by Mnewa and Maliti (2008), the majority of small businesses are less likely to attain or maintain their growing profitability due to factors including tax policies. This implies that as a policy maker and regulator, the Government must consider the factors that could affect the competitiveness of small enterprises, especially in the financial profitability of the SMEs.



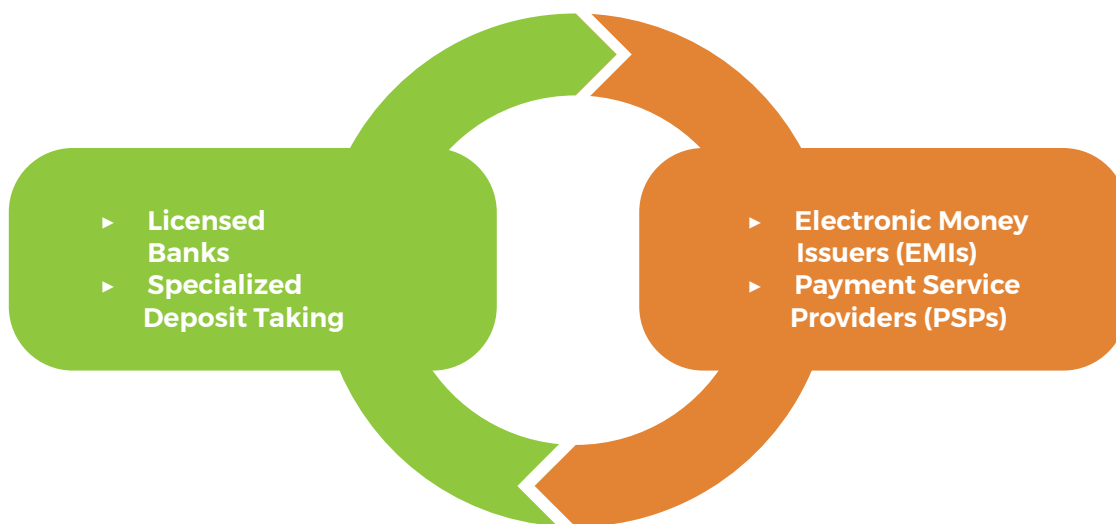
## Electronic Levy on Mobile Money Activities

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## Who collects the tax?

The levy shall be administered by the Ghana Revenue Authority (GRA). The levy will be charged whenever a person makes a transfer. MTN Mobile Money as a charging entity will add the levy to the transfer amount and charge both to the customer's wallet or account. MTN Mobile Money will then pay the levy collected from the subscriber to the Government. The institutions in the diagram are tasked to deduct the e-levy during the transaction event.

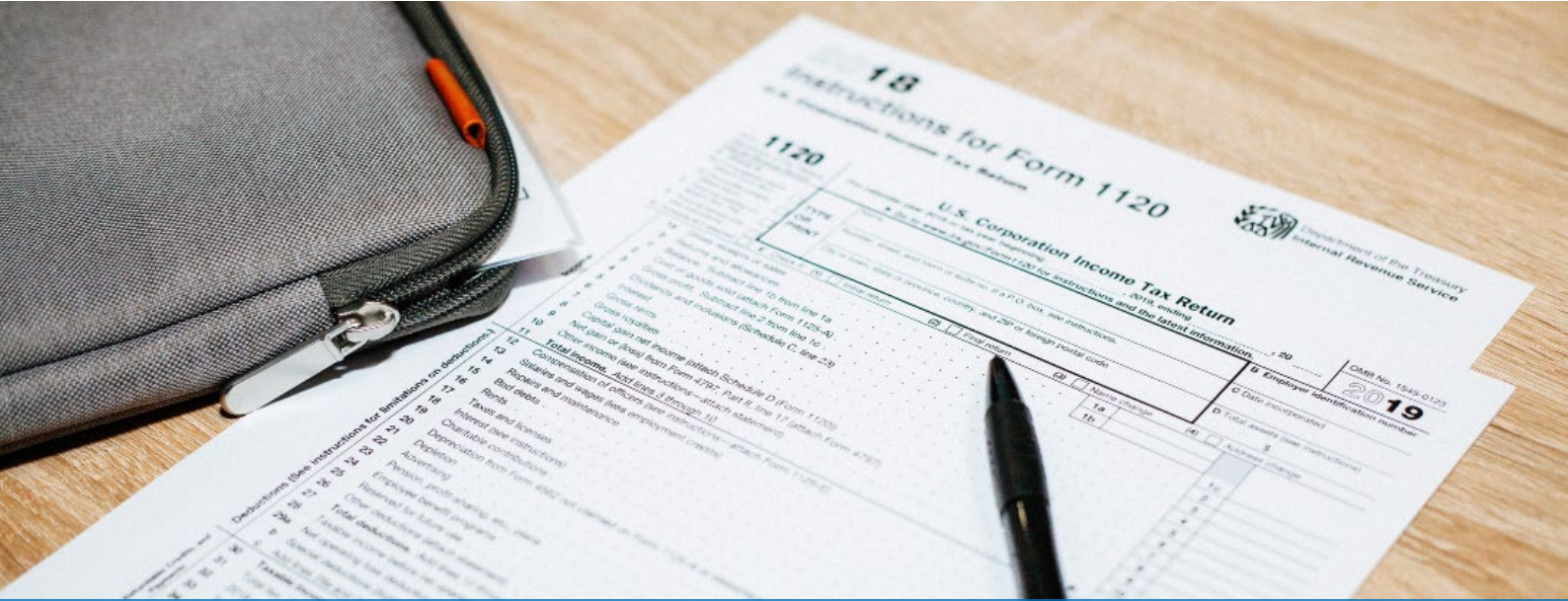


### Taxable mobile money activities

- ▶ Mobile money transfers between accounts on the same electronic money issuer (EMI)
- ▶ Mobile money transfers from an account on one EMI to a recipient on another EMI
- ▶ Transfers from bank accounts to mobile money accounts
- ▶ Transfer from mobile money accounts to bank accounts
- ▶ Bank transfers on an instant digital platform or application that originate from a bank account belonging to an individual to another individual

### Non-taxable mobile money activities

- ▶ Cumulative transfers of GHC100 per day made by the same person or account
- ▶ Transfers between accounts owned by the same person
- ▶ Transfers for the payment of taxes, and charges on the Ghana government platforms
- ▶ Electronic clearing of cheques
- ▶ Specified merchant payments (that is, payments to commercial establishments registered with the GRA for income tax and VAT purposes)
- ▶ Transfers between the principal, master agent, and agent's accounts



## Application of E-levy and telecommunication charges

The implementation of e-levy means that mobile money transfers comprise both e-levy (1.5%) and telecommunication charges (0.75%) which was effective 1st May 2022. The Finance Minister announced a reduction in the e-levy to 1% and this was effective 11th January 2023. Using the new e-levy reduction (1%).

Table 1: Sample of e-levy and telecom charges on MoMo (Value in GH¢)

Amount (GHS)	Telecom Fee	E-levy
GHS 1- GHS 50	GHS 0.38	N/A
GHS 50 – GHS 100	0.75% of the specific transaction value	N/A
GHS 100 – 1,000	0.75% of the specific transaction value	1% of the transaction value after the daily cumulative GHS100 nontaxable threshold
Above GHS 1,000	GHS7.5	1% of the transaction value after the daily cumulative GHS100 nontaxable threshold

Source: MTN Ghana

# Mobile Money Payment in Ghana

Mobile Money has shown considerable early success in driving the digitization of payments in Ghana's cash-dominated economy (GSMA Report, 2020). Interestingly, the Bank of Ghana Financial and Economic Data Report (2020) asserted that the total registered mobile money accounts stood at 32.7 million, whereas the total transactions value of GH¢ 30.1billion as of February 2020. Moreover, Statista Data (2022) showed that as of January 2021, 38.9% of the population aged 15 years and older had a mobile money account in Ghana. The total value of mobile money transactions grew by 82.4 % over the 2019 value to GH¢564.16 billion by the end of December 2020. Similarly, Stanbic Bank Team Report (2021) indicated that MM transactions have emerged as Ghana's most preferred digital payment method. According to the report, mobile money subscribers increased by 15% in 2020, with an estimated value of transactions at GH¢589 billion.

The payment brings several benefits to the user, including convenience, speed, flexibility, and affordability (GSMA, 2013). MM may be described as electronic cash backed by an equivalent amount of the Bank of Ghana notes and coins stored using the Subscriber Identification Module (SIM) in a mobile phone as an identifier. MM is issued by Mobile Money operators (MMOs) who keep the electronic account on the SIM in the mobile phone for the users of MM.

- ▶ One unique feature of the MMPS is the offline capability and interoperability in Ghana. This means a person on network A can directly transfer money to others on the same network A or network B, thus interoperability.
- ▶ In Ghana, the mobile money wallet is mainly used to transfer value from one person to another person (P2P) for payment of goods and services such as buying airtime, paying utility bills, Gold and DSTV bills, salaries of some workers, taxi fares, micro-credit, savings, and micro-insurance.

Figure 1: Mobile money features



Source: Agpaytech [Data, BoG Economic Data Report, 2021]

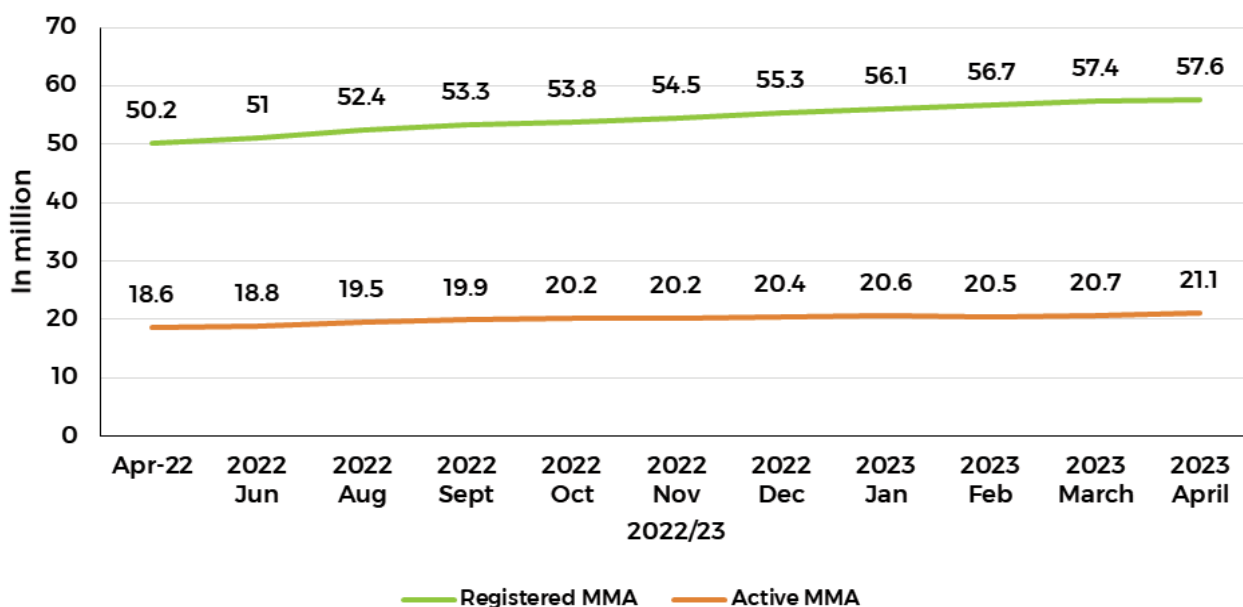


# E-levy Impact on Mobile Money Transaction

## Mobile Money Accounts (MMA)

Since the introduction of the e-levy on electronic transfers in Ghana, the total number of mobile money accounts has been increasing monthly. Yet the number of active mobile money accounts is less than half the total registered MMA per month. An active MMA means a person has at least made one transaction in the last three months. The reason for more inactive accounts could be attributed to the unlimited cap on the number of SIM cards a person can possess from a telecommunication network(s). For instance, the current Ghana Identification Card allows an individual to register up to 10 SIM Cards (Source). On average, most people have a mobile phone that can contain two SIM Cards. So if all the two cards are registered MMA, the probability of a person using all of them is low. This and other reasons like unaccounted dead persons, lost cards, blocked SIM, travelers, and others contribute to the large number of registered MMA but few active users. The e-levy plays no significant role in the number of registered and inactive MMA accounts in Ghana. This is because the gap has been a trend for decades and the introduction of e-levy did not seem to affect the statistics (either increase or decrease). Using data retrieved from the Bank of Ghana Economic Data Report, 2023, trends of total registered and active mobile money accounts are shown in Figure 2.

Figure 2: Registered vs active account



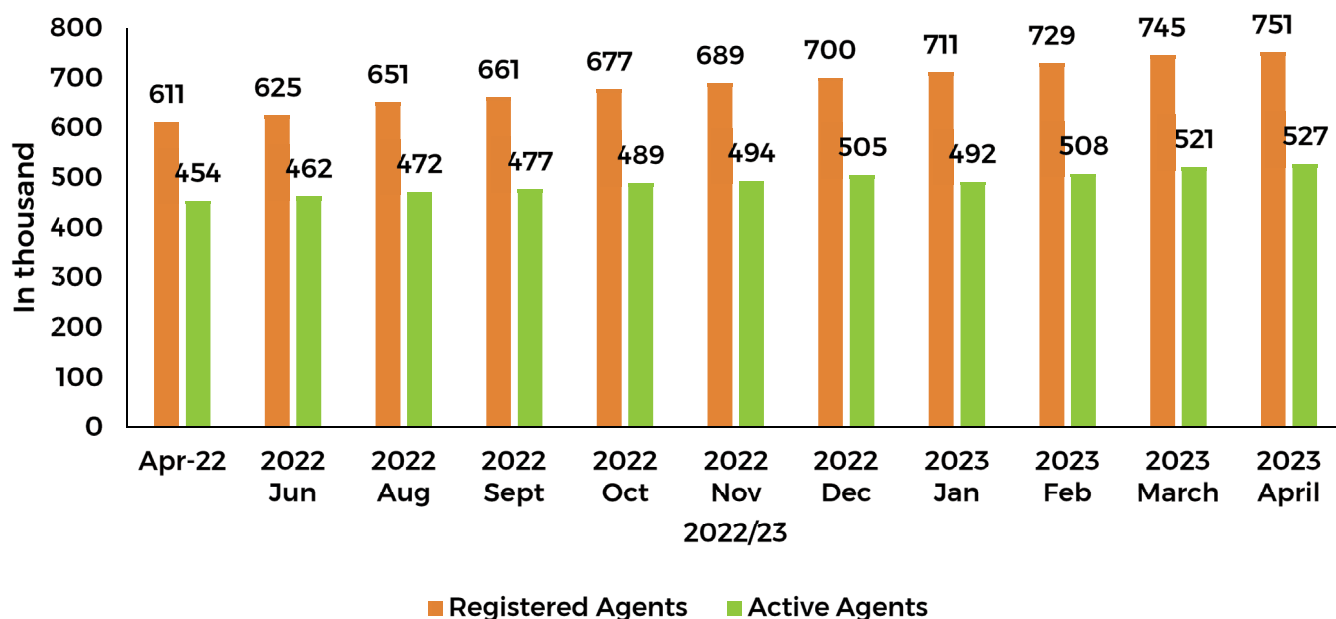
Source: Agpaytech



## Merchant/Agents Business

The mobile money merchant or agent business is crucial to the retail and wholesale payment system in Ghana. The process to acquire the merchant SIM card or status involves a rigorous process to protect the mobile network and consumers. Over the years, mobile money merchants operate in Kioks, tabletop and a few have had proper buildings or shops. They are not far reaching and in every 1 kilometer it's possible to see a merchant setup. However, the introduction of e-levy caused in roar among the agents about the possible negative effects on the business. Yet the number of registered and active agents never slowed down. In Figure 3, the study exhibited that the number of agents from April 2022 to April 2023 increased as seen by 18.64%, whereas the active agents increased by 13.85%.

Figure 3: Registered vs. active agents

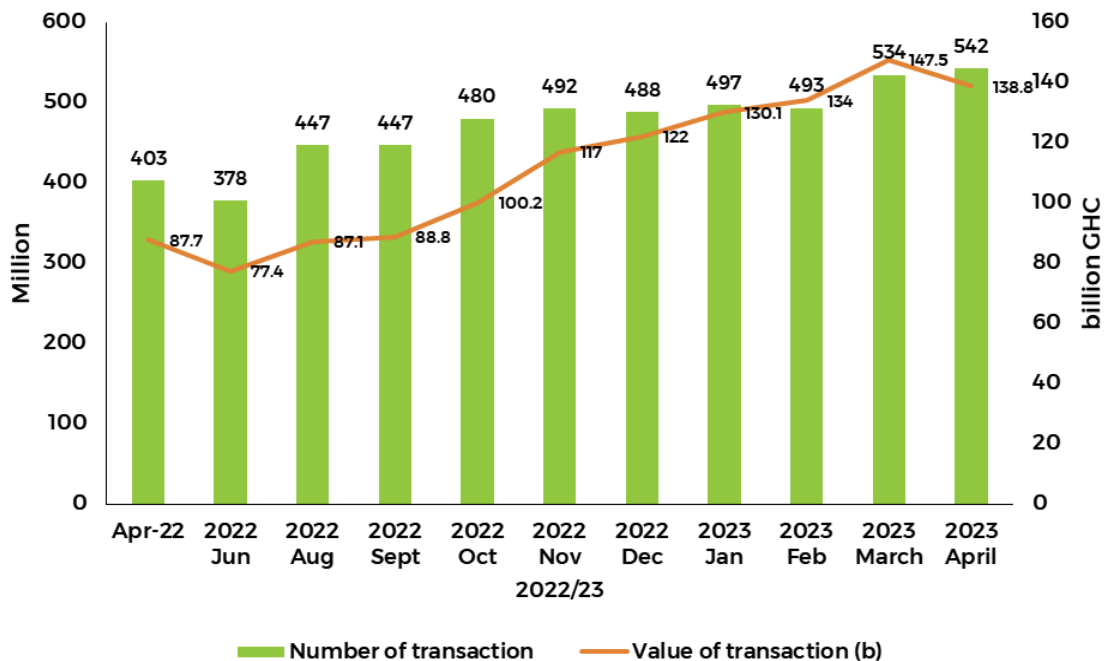


Source: Agpaytech [Data retrieved from BoG Economic Data Report, 2023]

# Number and Value of Transaction

The value and number of mobile money transaction is illustrated in Figure 4. The value of mobile money transactions has been increasing proportionately with the number of transactions even after the implementation of the e-levy. In April 2023, the total value of the transaction was GHC 138.8 billion, while the number of transactions stood at 542, 000.

Figure 4: Volume and value of the transaction



Source: Agpaytech [Data retrieved from BoG Economic Data Report, 2023]

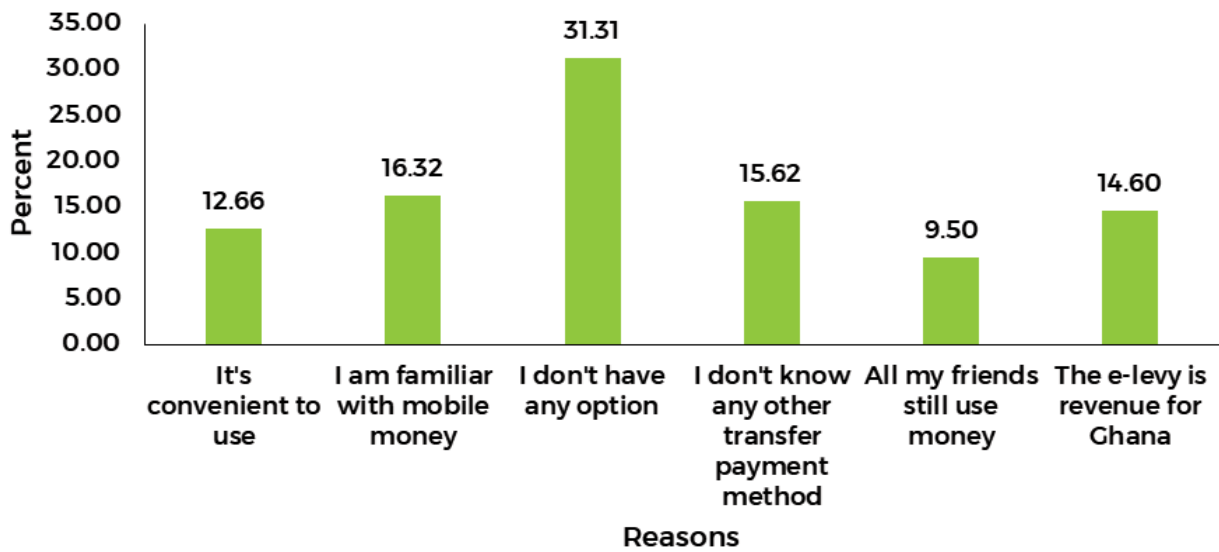


Consumers are often sensitive to costs, and if they perceive a payment method as more expensive due to levies, they may be inclined to choose a cheaper alternative. However, other complex factors may limit the consumer's choice to choose other payment methods.

## How electronic levies can influence consumers' payment choices

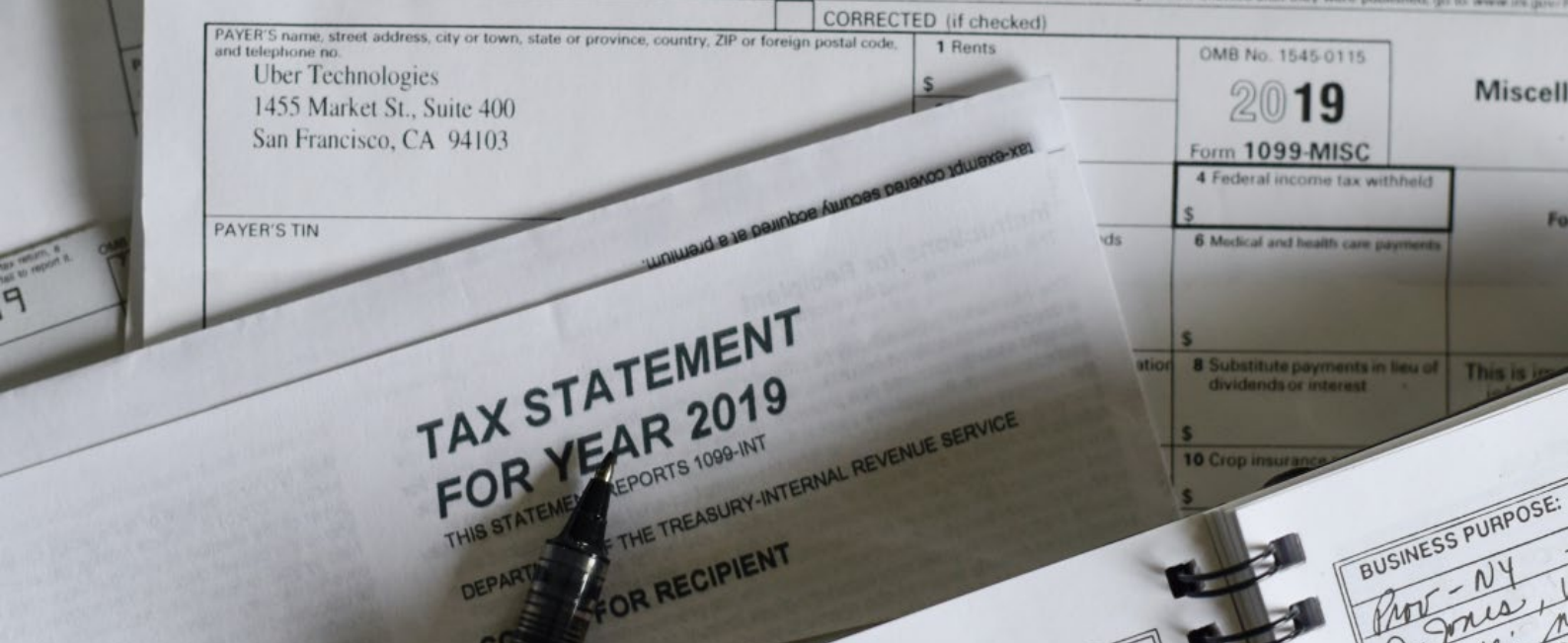
A survey was conducted on 2568 mobile money users from 15th August to 15th September 2023. To understand why consumers still prefer mobile money despite the many roars when it was first announced by the Finance Minister, one simple question with six options was posed to the consumers. The study discovered that 31.31% of the respondents argued they did not have any option, and 16.32 replied they were familiar with mobile money activities. Besides, 15.62% of the participants expressed they do not know any other transfer payment method, whereas 14.60% opined that e-levy is revenue for Ghana.

Figure 5: Why do you still use mobile money after the introduction of e-levy?



Source: Agpaytech

Electronic levies, such as transaction fees or surcharges, can increase the cost of using certain payment methods. Consumers are often sensitive to costs, and if they perceive a payment method as more expensive due to levies, they may be inclined to choose a cheaper alternative. However, other complex factors may limit the consumer's choice to choose other payment methods. In most situations, consumers compare convenience, incentives and discounts, education on alternative payment approaches, societal norms, and business continuity to the government regulations that are making them feel uncomfortable. Consumers may opt for alternatives that are easier and faster, even if those alternatives come with their costs. For example, a retailer might offer a discount for using a debit card instead of a credit card, which typically carries higher processing fees. In such cases, consumers may choose payment methods that result in cost savings. How consumers respond to electronic levies can also depend on their level of awareness and understanding of the fees. If consumers are well-informed about the costs associated with various payment methods, they may make more informed choices that align with their preferences. Social and peer influence can also play a role. If consumers see friends, family, or colleagues using a particular payment method, they may be more inclined to use it themselves, regardless of levies.



## Conclusion

The mobile money users and agents have raised concerns about mass withdrawals as a result of e-levy implementation due on 1st May 2022. While others are concerned that the e-levy will discourage users from patronizing mobile money services. Generally, the e-levy has sparked widespread anger among a section of Ghanaians because this could impact people's income, and reduce the use of mobile money payment. In a triple effect, the low-level income group is likely to return to the cash system as a way to overcome e-levy. In contrast, the mass agitation towards the e-levy seemed contrary to the implementation as the statistics of the number of accounts, agents, transactions and value of transactions showed that consumers still have no option but to rely on mobile money. One year since the e-levy came into effect, mobile money agents and accounts are appreciating every month.

In summary, electronic levies can influence consumers' payment choices, but the extent of that influence depends on a complex interplay of factors, including cost, convenience, incentives, education, and societal norms. Businesses, governments, and payment providers need to consider these factors when implementing levies or fees and when designing payment systems to ensure they align with consumer preferences and behaviors.

# ABOUT AGPAYTECH LTD.

Agpaytech Ltd. is a company pioneering in the Fintech Space with a focused approach to building robust technologies for e-commerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service (RaaS), Banking-as-a-service (BaaS), Foreign Exchange, Cross Border Payments, and digital currency technology.

We also provide practical white paper research support to central banks, government and private institutions, economic organizations, and NGOs in Africa. Our services expand from research projects, state-of-industry reports, project assessment, data collection, and consulting services in the financial market industry.

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